

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF WISCONSIN**

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M-B-W INC. and BARIKELL, S.r.l.,

Plaintiffs/Counterdefendants,

v.

MULTIQUIP, INC. and ALLEN ENGINEERING CORP.,

Defendants/Counterclaimants.

Case No. 07-CV-390

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MULTIQUIP, INC. and ALLEN ENGINEERING CORP.,

Counterclaimants,

v.

M-B-W INC. and BARIKELL, S.r.l.,

Counterdefendants.

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**ORDER**

On February 26, 2007, Multiquip, Inc. ("Multiquip"), a manufacturer of riding power trowels, sent a letter to M-B-W Inc. ("MBW") demanding that MBW cease the manufacture, importation, and sale of certain riding power trowels that Multiquip believes to infringe one of its patents - U.S. Patent No. 5,816,740 ("the '740 patent"). After failed efforts to resolve the dispute, MBW filed suit against Multiquip on April 27, 2007, seeking a declaratory judgment of non-infringement and the invalidity of one or more claims of the '740 patent. MBW later added Barikell S.r.l ("Barikell") as a plaintiff. Thereafter, Allen Engineering Corp. ("Allen Engineering") also joined the

suit, and together, Multiquip and Allen Engineering counterclaimed against MBW and Barikell, alleging, *inter alia*, infringement of claims one and two of the '740 patent.

After the close of discovery, defendants/counterclaimants (referred to collectively as "Multiquip" unless specified otherwise) moved the court for entry of partial summary judgment as to the issue of infringement. (Docket #73). Plaintiffs/counterdefendants (referred to collectively as "MBW" unless specified otherwise) brought a cross-motion for partial summary judgment as to the issue of non-infringement. (Docket #80). MBW also filed motions for partial summary judgment as to the issue of the invalidity of the '740 patent. (Docket #'s 76, 78). After review of these motions and their attendant filings, the court finds that Multiquip is entitled to summary judgment as to the issue of infringement. Regarding MBW's two motions for summary judgment as to invalidity, the court finds that MBW has not presented sufficient evidence in order to prevail on all the issues necessary to warrant an entry of summary judgment as to invalidity.

## **BACKGROUND**

Multiquip is a California corporation with its principal place of business in Carson, California. (MQ PFF [Re: Infringement], [Dkt. #90] ¶ 1). Allen Engineering is an Arkansas corporation with its principal place of business in Paragould, Arkansas. (Id. ¶ 2). Both Multiquip and Allen Engineering manufacture equipment

for the concrete industry, including devices known as “riding power trowels.” (Id. ¶ 5).

Riding power trowels are machines used to finish and smooth large areas of drying concrete. (Id. ¶ 6). Riding power trowels feature a seat on top of the machine from which the operator controls the device. (Id. ¶ 7). These machines are typically driven by one or more engines, which power two or more sets of radially-spaced, rotating rotor blades. (Id. ¶ 8; MBW Resp. MQ PFF [Re: Infringement] ¶ 8). The rotor blades smooth and finish the concrete, as well as propelling the machine across the concrete surface and permitting directional steering of the trowel. (MQ PFF [Re: Infringement] ¶ 9). These latter two functions are accomplished by the operator varying the tilt of the rotor assemblies such that the blades contact the concrete with greater frictional force at one portion of their rotation than at others. (Id. ¶ 9). For many years, this varying of the tilt of the rotor assemblies was accomplished through the manipulation of a series of levers and mechanical linkages. (MBW Resp. to MQ PFF [Re: Infringement] ¶ 10). Thus, for example, an operator would have to push and hold the steering levers in a forward position to move the trowel forward. (Id.). To move forward more quickly, the operator would have to push and hold the levers further forward. (Id.). Because the force needed to manually tilt the rotor assemblies is considerable, trowels steered in this manner are exhausting to operate. (Id.).

In an effort to reduce the physical exertion required to operate a riding trowel, companies developed variations that used hydraulics to accomplish the strenuous task of tilting the rotor assemblies. (Id. ¶ 11; MQ PFF [Re: Infringement] ¶ 11). The ‘740 patent, which is at issue in this case, is a patent for one such hydraulically steered power trowel. (MBW Resp. MQ PFF [Re: Infringement] ¶ 12). The ‘740 patent was issued to Timothy Jaskowiak, its inventor, on October 6, 1998. (MQ PFF [Re: Infringement] ¶ 13). It was subsequently assigned to Whiteman Industries, Inc., Multiquip’s predecessor-in-interest. (Id. ¶ 14).

At a trade show in early 2007, representatives of Multiquip and Allen Engineering saw a hydraulically steered riding power trowel displayed by MBW – a Wisconsin corporation with its principal place of business in Slinger, Wisconsin – that the Multiquip and Allen Engineering representatives believed to infringe on patents that were the subject of a cross-license agreement between Multiquip and Allen Engineering, including the ‘740 patent. (Id. ¶¶ 3, 17). The riding trowels in question (“the Accused Trowels”) are manufactured by Barikell – an Italian corporation with its principal place of business located in Modena, Italy – at its production facility in Italy. (Id. ¶ 18). The Accused Trowels are shipped from Italy to the U.S., where MBW sells them under its own name. (Id. ¶ 19).

## **ANALYSIS**

Summary judgment is appropriate where the movant establishes that there is no genuine issue of material fact and that it is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). “Material facts” are those facts which “might affect the outcome of the suit,” and a material fact is “genuine” if a reasonable finder of fact could find in favor of the nonmoving party. See *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). Summary judgment is appropriate where a party has failed to make “a showing sufficient to establish the existence of an element essential to that party's case and on which the party will bear the burden of proof at trial.” *Celotex*, 477 U.S. at 317. A party opposing summary judgment may not rest upon the mere allegations or denials of the adverse party's pleading, but must set forth specific facts showing that there is a genuine issue for trial. Fed. R. Civ. P. 56(e). Any doubt as to the existence of a material fact is to be resolved against the moving party. *Anderson*, 477 U.S. at 255.

### **I. INFRINGEMENT**

#### **A. Claim Construction**

Multiquip retained Mr. Dwayne Allen and Mr. Benjamin Wiese, experts in riding power trowels, to examine the Accused Trowels. (MQ PFF [Re: Infringement])

¶ 20). Both men concluded that all elements of claims one and two<sup>1</sup> of the '740 patent are present in the Accused Trowels. (Id.). Dr. Charles Garriss, an expert retained by MBW, agreed, with one exception, that all elements of claims one and two of the '740 patent are present in the Accused Trowels. (Id. ¶ 21). The only claim element Dr. Garriss argues is lacking in the Accused Trowels is: "engine means for powering said power trowel is attached to the frame means." (Id. ¶ 22). Dr. Garriss bases his opinion that this element is not met on the fact that on each of the Accused Trowels the engine is bolted to the gearbox, and it is the gearbox that is

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<sup>1</sup> Claim 1 of the '740 patent claims the following:

A self propelled power trowel, for finishing a concrete surface, which comprises:

rigid frame means adapted to be disposed over said concrete surface, said rigid frame means having a front and a rear and defining a centerline from front to rear: engine means for powering said power trowel attached to the frame means;

a pair of rotor assemblies for frictionally contacting said concrete surface and supporting said frame means thereabove, tiltably connected to the frame means and operably connected to the engine means;

at least three dual action hydraulic cylinders, with one of said dual action hydraulic cylinders operably interconnected between the rigid frame and each rotor assembly for selectively and independently tilting each rotor assembly toward and away from the centerline of the frame, and the third dual action hydraulic cylinder operably interconnected between the rigid frame and one of the rotor assemblies for tilting said rotor assembly fore and aft parallel to said frame centerline;

a hydraulic pump, having hydraulic fluid, operatively connected to the engine means and hydraulically connected to each of the dual action hydraulic cylinders; and

means for selectively delivering hydraulic fluid from the hydraulic pump to each of the dual action hydraulic cylinders at variably selectable pressure.

Claim 2 of the '740 patent claims the following:

The self propelled power trowel, for finishing a concrete surface, of claim 1, wherein the means for selectively delivering hydraulic fluid from the hydraulic pump to each of the dual action hydraulic cylinders at variably selectable pressure, further comprises a plurality of proportional pressure output control valves operatively interconnected between the hydraulic pump and each of the dual action hydraulic cylinders.

(MQ PFF [Re: Infringement] ¶¶ 15-16).

directly affixed to the frame. (MBW Resp. MQ PFF [Re: Infringement] ¶ 23). Though this gearbox is affixed to the frame - thus causing Multiquip's experts to assert that the "engine . . . attached to the frame" element is indeed met – Dr. Garriss holds that because the engine is not directly affixed to the frame, the "engine . . . attached to the frame" element is not met. (*Id.* ¶ 24). Thus, this issue of whether the Accused Trowels infringe the '740 patent hinges on whether an engine affixed to a gearbox that is affixed to the frame is either literally the same as, or equivalent to, an engine "attached to the frame."

When evaluating a claim of patent infringement, the court engages in a two-step process. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995). The first step is to construe any disputed terms of the patent claims, and the second step is to compare the claims, once properly construed, with the accused device. *Id.* Typically, claim construction is a question of law for the court, *id.* at 977, while comparison of the construed claims to the accused device is typically an issue of fact for a jury. *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 1353-54 (Fed. Cir. 1998). However, summary judgment for the patent holder is appropriate where no reasonable jury could find that the elements of a patent claim are absent, either literally or equivalently, from an accused device. *See generally Bai*, 160 F.3d 1350.

Claim construction analysis is guided by *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-25 (Fed. Cir. 2005). *Phillips* recognizes that the issue of claim construction breaks down into two scenarios: those that involve "little more than the

application of the widely accepted meaning of commonly understood words[,]" and those that involve "examination of terms that have a particular meaning in a field of art." *Id.* at 1314. For the former scenario, *Phillips* advises that "general purpose dictionaries may be helpful." *Id.* For the latter scenario, *Phillips* directs recourse to "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.* (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed. Cir.2004)).

The words of the patent's claims are given their ordinary and customary meaning that would have been attributed to them by a person of ordinary skill in the art at the time the invention was made. *Phillips*, 415 F.3d at 1312. Generally, in making this determination, the court should look first to the intrinsic evidence of record, such as the patent's claims, its specifications, and, if available, its prosecution history. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (1996). If a review of the intrinsic evidence alone resolves all ambiguities, then the court does not turn to extrinsic evidence. *Id.* at 1583. However, where intrinsic evidence is insufficient to resolve the issue, the court may turn to extrinsic evidence, such as dictionaries, expert witnesses, and case law. *Phillips*, 415 F.3d at 1317.

In the instant case, in which the court must determine whether the word "attached" means only "directly affixed" or can also include the meaning "connected



by an intervening device,” it certainly appears that the court is dealing with a word of the type envisioned by the first scenario articulated in *Phillips*. That is, one in which determining “the ordinary meaning of claim language as understood by a person of skill in the art . . . involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d 1303. If the instant case is in fact such a situation, then it seems evident that the court should construe “attached” to include the fastening of a piece of equipment (such as an engine) to a fixed structure (such as a frame) through the use of an intermediary device (such as a gearbox).

The court reaches this result not only from its own understanding of the word “attached,” but also through reference to the dictionary definition, as well as applicable case law. Of the many definitions for the word “attach” found in Webster’s Third New International Dictionary, the iteration most relevant (based on the dictionary’s proffered examples) is the fifth one: “to make fast or join (as by string or glue).” The proffered example for this definition is “attach price tags on each article.” Under this definition, an item (such as a price tag) could be attached in any number of ways, including directly (such as with a stick-on tag as one commonly finds with grocery items) or through an intermediary (such as with the type of tags one typically finds attached to an article of clothing). This understanding is supported by applicable case law. In *Royal Typewriter Co. v. Remington Rand, Inc.*, 168 F.2d 691

(2d Cir. 1948) Judge Learned Hand rejected the notion that “attached” means only “directly affixed”:

However, merely as matter of interpretation of the instrument as a whole, there is no reason to circumscribe the word, “attached,” in the claims to the very details of the disclosure and at least of all to the details of the figures. In point of colloquial speech no such limitation is to be implied; we speak of two objects as “attached” to each other, though they are connected by a train of links or even by a chain. Even more than in the case of the “trip bar” the infringement is well within any but a deliberately hostile interpretation of the claims.

*Id.* at 693. MBW maintains that this case law is inapplicable, and that reference to Judge Hand’s opinion is “disingenuous,” though the only reason MBW gives for its position is the age of the case. Has the meaning of the word “attached” changed in the intervening years? Not that the court is aware. In the end, MBW gives no compelling reasons why the case should be ignored.<sup>2</sup> The court is, of course, well aware that prior case law is not controlling when it comes to construction of terms in a patent claim. A term can vary from instance to instance depending on the facts, especially when the term is a term of art, or when it is a term that the inventor has used in an idiosyncratic manner. However, as the term “attached” is not a term of art, and as the inventor did not use it in an idiosyncratic manner,<sup>3</sup> the court finds that

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<sup>2</sup> Arguably the case cited is distinguishable from the instant case, as the intermediary component in *Royal Typewriter* was a screw (a common interlinking/attaching device) and the intermediary component in the instant case is a gearbox (not a common interlinking/attaching device). However, MBW makes no such argument; the court shall make no such argument.

<sup>3</sup> See discussion immediately below for explanation of court’s holding that inventor did not use the term in an idiosyncratic manner.

prior case law is relevant to interpreting a word's common, ordinary use and meaning.

MBW argues that the instant case is not of the kind envisioned in the first *Phillips* scenario, but rather of the kind envisioned in the second scenario. That is, one that involves “examination of terms that have a particular meaning in a field of art[,]” or one in which the patentee has “use[d] [the] term[] idiosyncratically.” *Phillips*, 415 F.3d at 1314. However, MBW has not argued that the word “attached” is a term of art, and MBW has failed to show that the patentee has used the word idiosyncratically – that is to mean something other than the commonly accepted definition of the word.

MBW argues that the intrinsic evidence reveals that the patentee intended a narrow definition for the word “attached”; a definition limited only to that which is “directly affixed” or “fastened.” (MBW Mem. Supp. Mot. S.J. [Re: Non-infringement] at 5). If there were evidence that the patentee had intended such a narrow definition, the court would, of course, be obliged to accept it, for “the inventor’s lexicography governs” claim construction of the patent. *Phillips*, 415 F.3d at 1316. MBW searches for such intent mainly in two places, the patent claims themselves, and the patent specifications.

MBW points out that “[t]he claims of the ‘740 patent use a variety of different terms to describe and claim different connecting relationships between various elements.” (MBW Mem. Supp. Mot. S.J. [Re: Non-Infringement] at 6).

For example, a pair of rotor assemblies are "tiltably connected" to the frame (claims 1 and 3; Fig. 2; Col. 7, L55-58). In contrast, the rotor assemblies are "operably connected" to the engine assembly through respective universal drive assemblies (claims 1 and 3; Col. 7, L58). At least one of three hydraulic cylinders is "operably interconnected" between the frame and a rotor assembly (claims 1 and 3; Col. 7, L59; Col. 8, L5). A pump is not illustrated in the drawings; however, the specification describes the pump as being "operatively connected" to the engine assembly and "hydraulically connected" to each hydraulic cylinder (Col. 4, L3-4; claims 3 and 4; Col. 8, L8-11). The pump is "interconnected" to the cylinders through hydraulic control valves, as well as hydraulic hoses and fittings (claims 2 and 4) (Garris [Decl., Docket 83 (hereinafter: "Garris")] ¶10).

The intrinsic evidence (i.e., the claims and patent specification) demonstrates that the terms "operatively connected" and "operably connected" do not require that one element must be affixed or fastened to another in a manner that results in the two components forming a unitary structure (Garris ¶12). The terms reflect a functional relationship between claimed components to one of ordinary skill in the art at the time of the invention, *Id.* In other words, the claimed components which are "operatively connected" and/or "operably connected" must be interrelated in a way to perform a designated function, *Id.*

(MBW Mem. Supp. Mot. S.J. [Re: Non-Infringement] at 6). The court concurs – as does Multiquip – with the foregoing analysis of the various phrases used in the claims. However, like Multiquip, the court does not find the foregoing analysis to be of any real relevance to the question at hand. The phrases MBW describes all relate to the interaction of components that operate on, or in conjunction with, one another. Those phrases explain the components, and how they interact. “Thus, the trowel rotor assemblies are ‘operably connected’ to the engine, because the engine drives – or causes to ‘operate’ – the rotor assemblies.” (MQ Br. Opp. Mot. S.J. [Re: Non-Infringement] at 7). However, as Multiquip points out: “[o]ne would not expect to see

the phrase ‘operably connected’ to describe a relationship between the engine and frame, because the engine does not act on, or ‘operate’ on, the frame[;] [t]he engine is simply . . . attached.” (Id.). Therefore, it is only reasonable that there is no functional phrase describing the manner of attachment, and it would certainly be unreasonable to infer some sort of limitation on the word “attached” on the basis of a lack of a functional phrase describing such an attachment or on the existence of functional phrases elsewhere. “[N]o *particular* method of ‘attachment’ is suggested, required, or excluded by the use of phrases like ‘operatively connected’ in other contexts” (id.), or by the lack of the use of such a phrase in the engine/frame context. Therefore, there is nothing in the claim itself to indicate that a person of ordinary skill in the art would read the word “attached” as not encompassing all its normal meanings, but rather, limited only to “directly affixed.”

Nor is there anything in the specifications that give such an indication. MBW argues that several uses of the term “attached” in the specifications do show that “attached” is limited to meaning “directly affixed.” MBW points to several instances in the specifications in which the term “attached” is used to describe components that are directly affixed. (MBW Mem. Supp. Mot. S.J. [Re: Non-Infringement] at 7-9). Multiquip raises a factual question as to whether the examples cited by MBW are in fact instances in which components are directly affixed. (MQ Br. Opp. Mot. S.J. [Re: Non-Infringement] at 9). However, ultimately it is of no consequence, nor is it necessary for the court to describe MBW’s cited examples in any detail. For the

sake of this analysis, the court will assume that all the instances in the specifications cited by MBW do demonstrate the use of the word “attached” to describe components directly affixed to one another. Again, the court fails to see the point of MBW’s argument. No one is asserting that “attached” does not include “directly affixed.” Obviously, things that are directly affixed are attached. MBW is the party that wants to show that “attached” is limited to “directly affixed”; showing that a word (“attached”) used to depict one of its ordinary meanings (“directly affixed”) in no way evidences an intent by the inventor to limit the word to that meaning. In the end, all MBW’s argument does is persuade the court that the term “attached” includes the meaning “directly affixed” – an issue that was never in contention.

Nothing in any of the intrinsic evidence indicates that a person of ordinary skill in the art would read the word “attached” as being limited to meaning only “directly affixed.” Examination of extrinsic evidence shows that the ordinary meaning of the word “attached” includes components attached to a fixed structure via another component. Thus, the court construes the term “attached” accordingly.

## **B. Literal Infringement**

Once the court has construed the terms of the claims, it compares them to the allegedly infringing devices. As previously mentioned, it is conceded that all elements of claims one and two are met, except for the engine-attached-to-frame element. Because the court construes the term “attached” as comprising its full ordinary meaning, and as that full ordinary meaning would encompass an engine

attached to a frame via a gearbox, the court finds that the Accused Trowels literally infringe the '740 patent.

### **C. Equivalent Infringement**

A device that does not literally infringe a patent can nonetheless still infringe under the “doctrine of equivalents.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 21 (1997). The doctrine of equivalents is designed to “prevent an infringer from stealing the benefit on an invention.” *Texas Instruments, Inc. v. U.S. Int’l Trade Comm’n.*, 805 F.2d 1558, 1572 (Fed. Cir. 1986). As the name of the doctrine suggests, equivalent infringement does not hinge on whether the accused device exactly copies each element of the patent’s claim. Such a requirement would “convert the protection of the patent grant into a hollow and useless thing[;] [s]uch a limitation would . . . encourage [] the unscrupulous copyist to make unimportant and insubstantial changes.” *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 607 (1986).

#### **1. Equivalence**

A determination that a device equivalently infringes a patent requires a finding of equivalence. A finding of equivalence requires finding that either “the difference between the claimed invention and the accused product . . . was insubstantial or that the accused product . . . performs the substantially same *function* in substantially the same *way* with substantially the same *result* as each claim limitation of the patented product.” *AquaTex Industries, Inc. v. Techniche Solutions*, 479 F.3d 1320, 1326

(Fed. Cir. 2007) (emphasis added). “A finding of equivalence is a determination of fact.” *Graver Tank*, 339 U.S. at 609. To prevail, “a patentee must [] provide particularized testimony and linking argument as to the ‘insubstantiality of the differences’ between the claimed invention and the accused device[,] . . . or with respect to the [aforecited] function, way, result test.” *Texas Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1567 (Fed. Cir. 1996).

Multiquip offers such testimony and argument both as to the insubstantiality of the difference between the Accused Trowels and the “engine . . . attached to frame” element, and as to the substantial similarity of the function, way, and result of the Accused Trowels and the disputed element.<sup>4</sup> Indeed, Multiquip’s experts stated in their reports that the engine/gearbox/frame arrangement of components on the Accused Trowels function in the same manner as, and achieve the same results as, the ‘740 patent’s engine/frame arrangement. (Baish Decl. Appx. A, Report of Dewayne Allen at 6; Baish Decl. Appx. J, Report of Benjamin Wiese at 4). Additionally, Multiquip cites to the testimony of MBW’s expert, Dr. Garriss, which Multiquip argues supports its contention:

Dr. Garriss admits that the engine provides pressure to the hydraulic pump, turns the trowel rotors, and thereby gives motive power to the Accused Trowels, just as in the ‘740 [p]atent. ([MQ PFF [Re: Infringement] ¶ 45]). The Accused Trowels also do not accomplish these functions in a substantially different way than is taught under the ‘740 [p]atent. The engine drives the hydraulic pump in the same way

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<sup>4</sup> A finding of equivalence requires that such a finding be made on a limitation-by-limitation basis. *Cypress Semidoncutor*, 90 F.3d at 1567. However, in the instant case there is only a single limitation in dispute. The parties agree that all other elements of claims one and two are literally met by the Accused Trowels.



as in the '740 [p]atent. The engine turns the rotors through the use of gearboxes, belts, and drive shafts. The hydraulic cylinders, using hydraulic fluid delivered under pressure from the pump, extend and displace their cylinders to tilt the trowel rotor assemblies. The rotor blades smooth and finish the concrete and, depending on the tilt of the rotor assemblies, move the trowel in a given direction by operation of frictional force. And the frame provides the base by which all of these components are supported, connected, and allowed to interact with one another. Likewise, there can be no dispute that the result is substantially the same in the Accused Trowels and the '740 [p]atent; the trowel moves across wet concrete, powered by the engine and steered by hydraulically adjustable rotor assemblies that smooth and finish the concrete as they rotate.

(MQ Mem. Supp. Mot. S.J. [Re: Infringement] at 22).

MBW argues that the Accused Trowels' function is substantially different because the engine tilts with the attached gearbox. (MBW Mem. Opp. Mot. S.J. [Re: Infringement] at 16). MBW argues that this function is achieved in a substantially different way as a result of the engine being attached to the associated gearbox to form a unitary assembly. (Id.). MBW argues that the result achieved is also substantially different, because affixing the engine to the gearbox provides a more efficient direction of power from the engine to the mechanical gearboxes. (Id.). Thus, MBW concludes that the engine/gearbox/frame arrangement found on the Accused Trowels is more than an insubstantial variation from that claimed in the '740 patent. (Id.).

As to the first argument, the court fails to see how the fact that the engine tilts with the frame constitutes a substantially different function. As Multiquip correctly, though somewhat snarkily, points out: "The Accused Trowels are not engine-tilting

machines, they are concrete smoothing machines.” (MQ Reply Br. Supp. Mot. S.J. [Re: Non-Infringement] at 12). Unfortunately, MBW offers no explanation as to how the tilting of the engine constitutes a meaningfully different function. It is no doubt a difference, but seemingly an irrelevant one.

This seems to be true as well for the allegedly “different way” – the attaching of the engine to the gearbox to form a unitary assembly. Of course, this is a different way, but of what significance? As Multiquip states, the “formation of a unitary assembly” is “perhaps an apt description [of] the Accused Trowels’ configuration, but it [invites] the question of whether this so-called ‘difference’ *means anything* to the function of the trowel or engine.” (Id.). The court is unable to conclude that it does make a difference to the way the Accused Trowels function in comparison to the ‘740 patent.

On the last prong of the test, the “result” prong, MBW actually offers argument as to how the Accused Trowels obtain a more than insubstantially different result than the ‘740 patent. MBW cites to Dr. Garris’s testimony for the proposition that mounting the engine on the gearbox reduces belt slippage, creates a tighter connection between the pulleys and the belt, and reduces the need for intermediary bearings (thus resulting in less frictional loss). (MBW Mem. Supp. Mot. S.J. [Re: Non-Infringement] at 13-14). In short, “fixing the engine on the gearbox provides a more efficient direction of power from the engine to the mechanical gearboxes.” (Id. at 13). The substantiality of this increased efficiency is a question MBW leaves

unaddressed.<sup>5</sup> Regardless, be it substantial or insubstantial, it is irrelevant, as “infringement cannot be avoided by the mere fact that the accused device is more or less efficient or performs additional functions.” *McCullough Tool Co. v. Well Surveys, Inc.*, 343 F.2d 381, 402 (10th Cir. 1965) (quoted in *Amstar Corp. v. Envirotech Corp.*, 730 F.2d 1476, 1482 (1984)). Thus, even if placement of the engine on the gearbox creates a better, more efficient device, this is ultimately inconsequential to the question of equivalence.<sup>6</sup>

Given Multiquip’s proffered testimony and argument as to the substantial similarity of the function, way, and result between the ‘740 patent and the Accused Trowels, as well as MBW’s dearth of meaningful response – other than to argue that the Accused Trowels are more efficient (which is irrelevant in an equivalence analysis) – the court finds that any difference between the Accused Trowels and the ‘740 patent is insubstantial. The Accused Trowels present the equivalent of all the elements of claims one and two of the ‘740 patent.

## **2. All Elements Rule**

Even though the court holds that equivalence exists, the court cannot hold that the accused device infringes the patent if doing so would entirely vitiate a particular claimed element or limitation. *PSN Illinois, LLC v. Ivoclar Vivadent, Inc.*, 525 F.3d

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<sup>5</sup> According to Dr. Garris, the amount of added efficiency can be measured, but he made no attempt to do so. (MQ Add’l PFF [Re: Infringement] ¶ 12).

<sup>6</sup> Multiquip pointed out in several of its briefs that an increase in efficiency or reliability does not prevent a finding of equivalence. MBW offered no refutation to either Multiquip’s argument or supporting case law.

1159, 1168 (Fed. Cir. 2008). This is known as the “all elements rule.” It exists because “the doctrine of equivalents does not grant [a patentee] license to remove entirely [any of the] limitations from the claim.” *Sage Products, Inc. v. Devon Industries, Inc.*, 126 F.3d 1420, 1424 (Fed. Cir. 1997) (quoted in *TIP Systems, LLC v. Phillips & Brooks/Gladwin, Inc.*, 529 F.3d 1364, 1377 (Fed. Cir. 2008)). MBW asserts that any finding of equivalent infringement would render the “engine . . . attached to the frame” element meaningless. (MBW Mem. Supp. Mot. S.J. [Re: Non-Infringement] at 12). Multiquip argues that such a finding would not render the element meaningless. (MQ’s Br. Supp. Mot. S.J. at 25).

In evaluating the opposing sides’ arguments, *Asyst Technologies, Inc. V. Emtrak, Inc.*, 402 F.3d 188 (Fed. Cir. 2005) – which both parties cite as support for their respective positions – is particularly enlightening. In *Asyst*, the plaintiff’s patent – pertaining to an information-processing and inventory-management system – specified a system in which “microcomputers mounted on each pod communicate with microcomputers mounted on each wafer processing tool.” *Id.* at 1190. The point of contention was the term “mounted on,” as the accused system did not contain individual microprocessors mounted on workstations, but instead relied on a central processing computer that communicated with the workstations via a cell controller utilizing a cable connection. *Id.* at 1190-93. The appellate court concluded that “mounted on” should be given its ordinary meaning. *Id.* 1193-94. The court found that microcomputers in the alleged products were unmounted, and

that the case thus fell under the “‘specific exclusion principle,’ since the term ‘mounted’ can fairly be said to specifically exclude objects that are ‘unmounted.’” *Id.* at 1195. Hence, the court held that the alleged system did not equivalently infringe the patent, for a finding that it did would vitiate the “mounted on” limitation altogether. *Id.*

The fact that MBW and Multiquip each believe that Asyst supports their respective, and opposing, positions, bespeaks a fundamental – though heretofore unidentified – question that is incredibly germane to the issue of equivalent infringement in the instant case. As a preliminary matter, it should be pointed out that given the court’s ruling on literal infringement, the only reason equivalent infringement is being addressed is because of the reality that the court could be reversed by the appellate court as to the issue of literal infringement. As the court sees it, there are two bases on which the appellate court could reject the court’s literal infringement finding: 1) a holding that the intrinsic evidence evinces an intent on the part of the inventor to limit the word “attached” to mean only “directly affixed”; or 2) a holding that the inventor did not intend to limit the meaning of the word “attached,” but that, even giving “attached” its full and ordinary meaning, one cannot say that an engine is attached to a frame if the engine is affixed to a gearbox that is affixed to a frame. Herein lies the aforementioned, as yet unidentified question, namely: which one of these two foregoing rationales underlies the hypothetical no-

literal-infringement finding that would then trigger the equivalent-infringement analysis.

If the court's literal infringement ruling is overturned on the basis of the first rationale (that the inventor meant "attached" to mean only "directly affixed"), then MBW's take on *Asyst* is applicable, and the all elements test would foreclose a finding of equivalent infringement. This is because "engine . . . [directly affixed] to the frame" would be a specific limitation within the '740 patent's claims, and a finding that the Accused Trowels – which do not have engines affixed directly to the frames – are equivalent infringers would entirely vitiate the "engine . . . [directly affixed] to the frame" limitation. For if "attached" means only "directly affixed" then the arrangement on the Accused Trowels, in which the engine is not directly affixed, would be *specifically* excluded from the patent's claims through use of the word "attached" (read: directly affixed).

However, if the court's literal infringement ruling is overturned on the basis of the second rationale (that an engine affixed to a gearbox affixed to the frame is not attached to the frame, even giving "attached" its full ordinary meaning), then Multiquip's take on *Asyst* is applicable, and the all elements test would not foreclose a finding of equivalent infringement. This is because the claim element "engine . . . attached to the frame" would not be entirely vitiated by a finding of equivalent infringement, so long as "attached" doesn't require direct affixation. For example, the most likely basis for reversal under this second rationale would be a finding that

while two components may be attached via an intermediary component, that intermediary component must be primarily an attaching component. Thus, under this second “reversal rationale” an engine could be attached to the frame via a mounting platform, or some sort of encasement, or essentially any component the primary function of which was to serve as a connecting intermediary. Such a definition would exclude a finding that the Accused Trowels literally infringe the ‘740 patent because, though the gearbox serves as a connecting intermediary, that almost certainly is not its primary function. However, such a definition would not amount to a specific limitation such that attachment via the gearbox would vitiate the “engine . . . attached to the frame” element. For, while the Accused Trowels’ engine/frame arrangement would not quite meet that definition of “attached,” it would not be *specifically* excluded by that definition.<sup>7</sup> Thus, it would be the very type of scenario the doctrine of equivalents is designed to protect against.

The doctrine of equivalents will only come into play if this court’s ruling of literal infringement is overturned on appeal. If this occurs, then the court’s secondary ruling as to whether the Accused Trowels equivalently infringe depends on the appellate court’s rationale for finding that the Accused Trowels do not literally infringe. If the rationale is that the inventor intended “attached” to mean only

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<sup>7</sup> If “attached” is given its ordinary meaning, then the Accused Trowels’ configuration would be specifically excluded only if they could be deemed to be “unattached” (meaning: “not joined or united”) or “detached” (meaning: “separate, unconnected, isolated”). As the court finds that the Accused Trowels’ configuration does not present an engine that is “not joined” to the frame, or an engine that is “unconnected” to the frame, the court finds that the configuration presented by the Accused Trowels is not specifically excluded by use of the word “attached,” if “attached” is given its ordinary meaning. This is the case even if that ordinary meaning does not encompass the engine/gearbox/frame configuration in the Accused Trowels.

“directly affixed,” then the Accused Trowels do not equivalently infringe, because in that case “direct affixation” would be a limitation within an element of the claims that would be vitiated by a finding that trowels with non-directly affixed engines infringed. If, however, the rationale for overturning the court’s finding of literal infringement is any other rationale, then the court finds that the Accused Trowels do equivalently infringe the ‘740 patent.

#### **D. Patent Misuse**

In an effort to prevent summary judgment against it on the issue of infringement, MBW seeks to raise a material factual question by alleging that Multiquip has misused the asserted patent. (MBW Mem. Opp. Mot. S.J. [Re: Infringement] at 17). MBW alleges that Multiquip and Allen Engineering agreed not to license to third parties any of the patents subject to the cross-license agreement between Multiquip and Allen Engineering. (Id.). MBW also states that Multiquip and Allen Engineering have a joint agreement to assert their patents through a document titled: “Joint Defense Agreement.” (Id. at 20.). MBW alleges that “Multiquip and Allen Engineering have pooled their patents together and agreed to assert them against at least [MBW] and Barikell[] without [MBW], Barikell or any other third party having the opportunity to obtain a license under the patent.” (Id.). This, MBW maintains, “amounts to a combination or conspiracy between Multiquip and Allen Engineering having a common purpose of suppressing competition and restraining trade in the United States.” (Id.). “[MBW]’s patent misuse defense is based in the



notion that patent misuse is an equitable defense to patent infringement and ‘arose to restrain practices that did not in themselves violate any law, but that drew anticompetitive strength from the patent right, and thus were deemed to be contrary to public policy[.]’” (Id.) (quoting *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 704 (Fed. Cir. 1992)).

MBW cites *U.S. v. Singer Mfg. Co.*, 374 U.S. 174 (1963) for the proposition that “a refusal to license *combined* with pooling of patents and an agreement to assert those pooled patents against third parties suppresses competition[.]” and thus constitutes patent misuse. (MBW Mem. Opp. Mot. S.J. [Re: Infringement] at 21). As the alleged infringer, MBW bears the burden of producing evidence on each of the prongs necessary to MBW’s affirmative defense of patent misuse. See *Lockformer Co. v. PPG Industries, Inc.*, 264 F. Supp. 2d 622, 629 (N.D. Ill. 2003) (citing *Virginia Panel Corp. v. MAC Panel Co.*, 133 F.3d 860, 868-69 (Fed. Cir. 1997)).

MBW’s sole source of evidence in support of the refusal-to-license-to-third-parties prong of MBW’s patent misuse claim is the testimony of Attorney Frank Dykas, a patent attorney who served as counsel for Multiquip and Allen Engineering. (MBW Mem. Opp. Mot. S.J. [Re: Infringement] at 17). Attorney Dykas’s testimony, while not well developed, implies that Multiquip and Allen Engineering had an unwritten agreement not to license the patents subject to their cross-license agreement to any third parties. He testified as follows:

- Q. But was the agreement between Allen Engineering and Multiquip that they would not license anybody else? Was that condition or part of an oral agreement between them?
- A. That was part of the decision made to protect their patents from infringement, the intentional infringement by M-B-W and Barikell.
- Q. Was that in writing or was that oral?
- A. That was oral at the time the agreement was made.
- Q. Who was the oral agreement between? The individuals.
- A. You'll have to ask them, but I believe it was Dewayne Allen and Roger Euliss who initially came to that agreement.
- Q. And did you -- were you a part of the negotiations that led up to that agreement?
- A. No. As I told you, they discussed it at the World of Concrete show when they saw the intentionally infringing M-B-W/Barikell machine.
- Q. So the agreement between M-B-W -- I'm sorry. The agreement between -- strike that. The agreement between Allen Engineering and Multiquip not to license anybody else occurred after they saw the M-B-W and Barikell devices?
- A. I think the agreement was that they were not going to license M-B-W or Barikell to make you sell or offer for sale that machine in the United States. They felt it was an intentional infringement and a provocation and they were not going to license their agreements. They were going to defend their patents. That's the agreement they made.
- Q. Was there any agreement not to license the patents to other parties prior to that time?
- A. No, I don't think so.
- Q. But you were not a party to those?
- A. I wasn't a party to them
- Q. So you're just basing it on speculation at this point, right?
- A. I can't get into the mind of another person any more than you can.

(Dykas Dep. at 83:12-85:3)

(MBW Resp. MQ PFF [Re: Infringement] ¶ 58-59). Contrary to Mr. Dykas's testimony, Mr. Euliss and Mr. Allen both attest that there was never any agreement

between Multiquip and Allen Engineering not to license their respective patents to third parties. (MQ PFF [Re: Infringement] ¶ 60).

Typically, the above disagreement as to the issue of whether such an agreement existed would constitute a question of material fact to be decided by a jury. However, a question of material fact must be based on admissible evidence. It appears that the entirety of Mr. Dykas's testimony as to the agreement between Multiquip and Allen Engineering is based on "speculation" or conjecture, not on personal knowledge. Thus, Rule 602 of the Federal Rules of Evidence would render Mr. Dykas's testimony – the only evidentiary support for the first prong of MBW's patent misuse affirmative defense – inadmissible. It may well be that the line of questioning was simply inadequately developed,<sup>8</sup> and that Mr. Dykas does in fact have personal knowledge of the alleged agreement. However, no such assertion is made by MBW. MBW, as the party proffering the evidence, bears the burden of demonstrating its admissibility; and MBW, as the party asserting the affirmative defense, bears the burden of producing admissible evidence in support of each of the prongs of the affirmative defense. Given MBW's failure to make any showing in support of the admissibility of Mr. Dykas's testimony, despite Multiquip having pointed out its inadmissibility to MBW, the court is obliged to disregard it at this juncture. Thus, there is presently no factual question as to MBW's patent misuse defense (as the first prong of said defense is presently not supported by any

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<sup>8</sup> For example, the deposing attorney could have asked: "Mr. Dykas, what is the basis for your assertion that such an agreement exists?"

admissible evidence), thus, the court will, given its previous holdings regarding infringement, grant summary judgment to Multiquip as to the issue of infringement. However, the court will allow MBW to, within 30 days from the date of this order, file a motion for reconsideration pertaining to the issue of MBW's affirmative defense of patent misuse. If MBW can demonstrate that Mr. Dykas's testimony is admissible under the Federal Rules of Evidence (as well as that the other prongs of the proffered defense are supported by admissible evidence), then the court will reconsider whether such defense should be available to MBW.

#### **E. Conclusion**

The court finds that the word "attached," as used in claims one and two of the '740 patent, should be given its ordinary meaning. The court finds that an engine affixed to a gearbox which is affixed to a frame constitutes an engine that is attached to a frame if "attached" is given its ordinary meaning. The court, therefore, finds that the Accused Trowels literally infringe the '740 patent. Furthermore, the court finds that if the court is mistaken as to the fact that an engine affixed to a gearbox affixed to a frame fulfills the ordinary definition of "attached," the court finds that the Accused Trowels equivalently infringe the '740 patent, because all the elements of claims one and two are present in the Accused Trowels, and the Accused Trowels' engine/gearbox/frame configuration would not be specifically excluded by the word "attached" if that word is given its ordinary use. However, the court finds that if the word "attached" is held to mean only "directly affixed" then the Accused Trowels do

not equivalently infringe, for the Accused Trowels' engine/gearbox/frame configuration would be specifically excluded by the word "attached" if that word is restricted to mean only "directly affixed." Lastly, the court finds that MBW has not created a material factual question as to the affirmative defense of patent misuse, because it has failed to demonstrate the admissibility of the evidence it bears the burden of producing in support of its claim. The court accordingly grants Multiquip's motion for summary judgment regarding infringement, and denies MBW's motion for summary judgment regarding non-infringement.

## **II. INVALIDITY UNDER 35 U.S.C. § 102(b)**

MBW alleges that the '740 patent is invalid under 35 U.S.C. § 102(b). MBW has moved for summary judgment as to this issue.

According to 35 U.S.C. § 102(b): "A person shall be entitled to a patent unless . . . the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for the patent in the United States[.]" Such an invention is deemed to be "anticipated," which means that it lacks novelty (novelty is fundamental to patent protection), thus is an invalid patent. See *Beckson Marine, Inc. v. NFM Inc.*, 292 F.3d 718, 725 (Fed. Cir. 2002). "[A] claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference." *Ceritas Tech. v. Rockwell Int'l Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998). Anticipation is a question of fact, but "it may be decided on summary

judgment if the record reveals no genuine dispute of material fact.” *Leggett & Platt, Inc. v. VUTEK, Inc.*, 537 F.3d 1349, 1352 (Fed. Cir. 2008).

According to MBW, claims one and two of the ‘740 patent are invalid because each and every claimed element is disclosed in the prior art German Patent No. DE 94 18 169 (“the German ‘169 patent”).<sup>9</sup> (MBW Mem. Supp. Mot. S.J. [Re: 102(b)] at 1). It is undisputed that the first five elements of claim one of the ‘740 patent are disclosed by the German ‘169 patent. (MQ Br. Opp. Mot. S.J. [Re: 102(b)] at 1). The only remaining issue pertaining to anticipation is whether the German ‘169 patent discloses proportional steering (as specified in claim two of the ‘740 patent as well as the last element of claim one of the ‘740 patent). It is undisputed that the German ‘169 patent does not expressly disclose proportional steering; however, MBW argues that proportional steering is inherently disclosed by the German ‘169 patent. (MBW Mem. Supp. Mot. S.J. [Re: 102(b)] at 14-15). “Under the principles of inherency, if the prior art necessarily . . . includes[] the claims limitations, it anticipates” the patent. *Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1376 (Fed. Cir. 2005). “Inherency . . . may not be established by probabilities or possibilities.” *Hansgirk v. Kemmer*, 102 F.2d 212, 214, (CCPA 1939) (quoted in *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981)). Thus, the question before the court is whether proportional steering is – though not expressly disclosed – necessarily present in the German ‘169 patent.

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<sup>9</sup> The German ‘169 patent was published at least as early as March 9, 1995, more than one year before January 23, 1997, the date on which the application for the ‘740 patent was filed.

The following explanation of proportional steering lays a necessary foundation for the forthcoming analysis:

A hydraulic system with “proportional control” is a system in which the displacement of the piston within the hydraulic cylinder is in proportion to the movement of the device used to actuate the cylinder. (Garris Dep. at 116:13-117:4; Proposed Additional Findings of Fact (hereafter, “Def. Prop. Facts”) at ¶ 1.) In practical terms, using as an example a riding trowel with proportional steering, this means that the trowel moves forward when the joystick (or other steering device) is deflected forward, moves forward faster when the joystick is deflected forward farther, and decelerates to a stop when the joystick is released and comes to its neutral position. (Garris Dep. at 117:5-18; Def. Prop. Facts at ¶ 2.) A riding trowel with proportional steering automatically comes to rest when the joystick is not deflected, such as when it is released by the operator, because all pressure is removed from the hydraulic cylinder, the hydraulic piston returns to its neutral position, and the trowel stops moving. (Tullis Decl. at ¶¶ 39-43, 60; Def. Prop. Facts at ¶ 3.)

In contrast is a hydraulic system using “on/off” valves, in which displacement of the piston within the hydraulic cylinder continues after the actuating device (such as a joystick) returns to its neutral position, unless and until some other action is taken, because the valve closes completely and thereby prevents the hydraulic fluid from leaving the hydraulic cylinder. (Tullis Decl. at ¶¶ 29-32, 57-59; Def. Prop. Facts at ¶ 4.) In practical terms, this means that one operating a riding trowel using an “on/off” hydraulic steering system must displace the joystick (or other steering mechanism), thereby opening the valve and supplying pressurized fluid to the hydraulic cylinder, until the trowel achieves the desired speed. At that point, the joystick must be returned to its neutral position, or the trowel will continue to accelerate. (Tullis Decl. at ¶ 58; Def. Prop. Facts at ¶ 5.) Even if the joystick is returned to its neutral position, however, the trowel will continue to move at a constant speed, as the hydraulic cylinder will remain displaced. To slow or stop the trowel, one must deflect the joystick or steering mechanism in the opposite direction (i.e., backward, if the trowel is moving forward) until the trowel slows, stops, or ultimately reverses direction. (Tullis Decl. at ¶ 32-35; Def. Prop. Facts at ¶ 6.)

(MQ's Br. Opp. Mot. S.J. [Re: 102(b)] at 3-4). It is undisputed that the German '169 patent discloses a riding trowel with hydraulic steering. (Id.). The only dispute is whether or not that hydraulic steering system is a proportional hydraulic steering system. MBW looks to several different places for support for its argument that the German '169 patent does disclose hydraulic proportional steering. These places are: Figure 2 of the German '169 patent,<sup>10</sup> paragraphs 0002, 0003, and 0005 of the German '169 publication,<sup>11</sup> Multiquip's prior actions pertaining to the '740 patent and the '169 patent, and the state of the art regarding proportional pressure control valves at the time the '169 patent was submitted.

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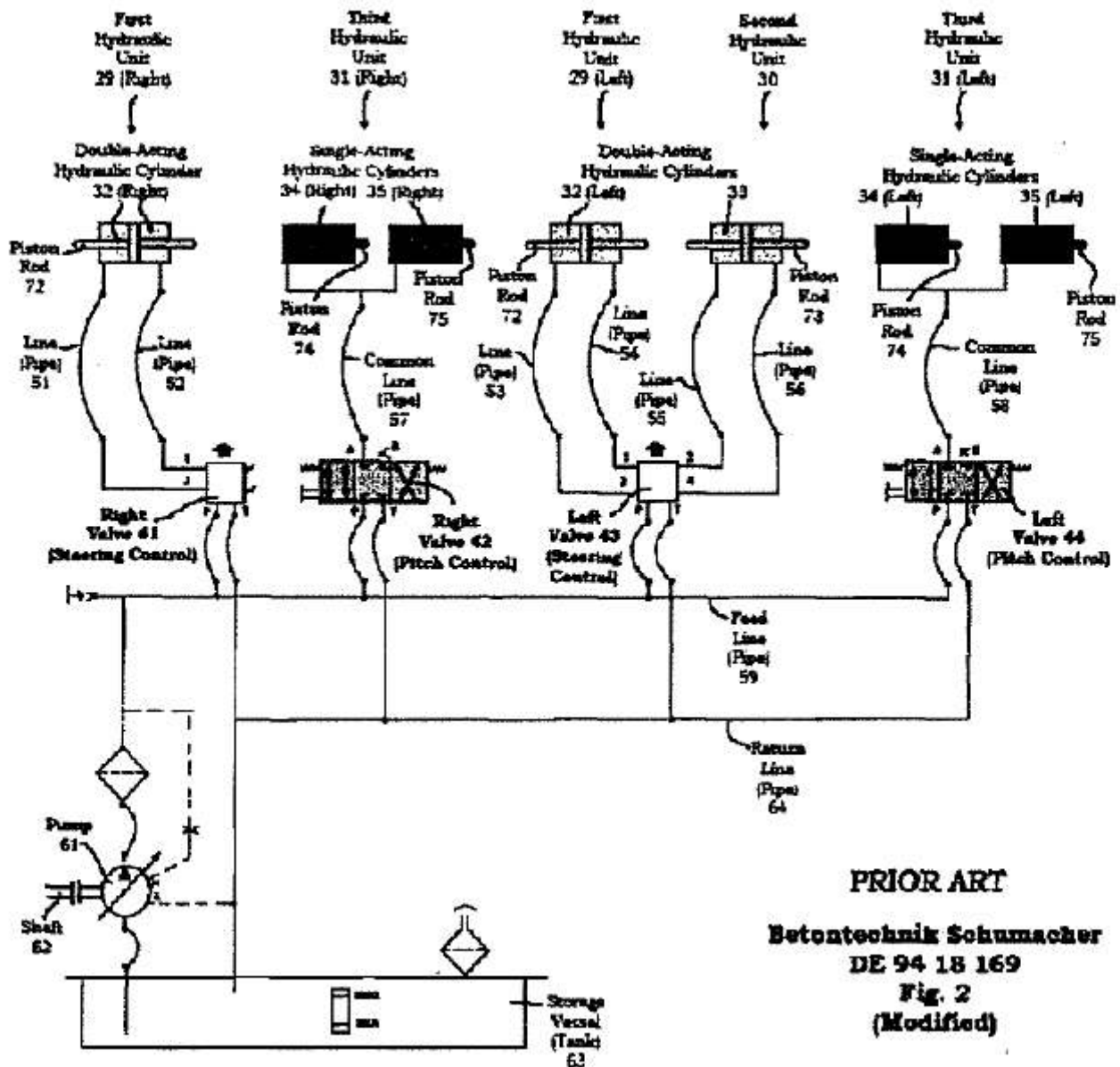
<sup>10</sup> Figure 2 is a depiction of the hydraulic valve system used to control pitch and steering in the German '169 patent.

<sup>11</sup> Paragraph 0002 describes the disadvantages of prior-art manual, mechanically-steered riding trowels. Paragraph 0003 speaks to the goal of the German '169 patent. Paragraph 0005 describes the achievements of the German '169 patent.



A. Figure 2 of the German '169 Patent

Figure 2 of the German '169 patent depicts the hydraulic schematic for that patent:



(MBW Mem. Supp. Mot. S.J. [Re: 102(b)] at 16; Garris Decl. [Re: Invalidity], Tab 5 at MBW 001273). MBW points to two features of the above hydraulic system as support for the premise that the German ‘169 patent discloses proportional hydraulic steering. The first such feature are the depictions of the steering control valves, valves 41 and 43. Valves 41 and 43 are depicted as blank white boxes. This depiction is a stark contrast to the depiction of the pitch control valves, valves 42 and 44. It is undisputed that valves 42 and 44 depict on/off hydraulic valves. (MQ’s Br. Opp. Mot. S.J. [Re: 102(b)] at 17). MBW argues that the fact that valves 41 and 43 are depicted differently than the on/off valves, 42 and 44, means that “[o]ne of ordinary skill in the art will recognize that valves 41, 43 are not on/off valves, as they have a different schematic representation[,]” and that “[v]alves 41 and 43 are necessarily proportional control valves.”<sup>12</sup> The second feature of Figure 2 that MBW points to are mushroom shaped valve actuator symbols (located in Figure 2 directly atop valves 41 and 43), which MBW asserts are indicative of proportional control valves. (MBW. Mem. Supp. Mot. S.J. [Re: 102(b)] at 20).

### **1. Valves 41 and 43**

MBW’s contention that valves 41 and 43 are proportional pressure control valves is based on the testimony of MBW’s expert witness, Dr. Garris. Dr. Garris testified that valves 41 and 43 are depicted differently than 42 and 44, and that 41 and 43 “are characterized by a typical structure corresponding to a proportional

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<sup>12</sup> Neither party ever states that there are only two types of hydraulic control valves – on/off and proportional – however, both parties’ briefs strongly imply that such is the case.

valve.” (Id. at 18). The difference between the depictions of the steering valves and the indisputedly on/off pitch control valves is the predominant evidence Dr. Garris cites to for his opinion that Figure 2 depicts proportional valves at 41 and 43. (Id. at 18-19).

Multiquip takes issue with MBW’s line of reasoning, and argues that the court cannot conclusively determine that valves 41 and 43 are proportional control valves simply based on the fact that they are depicted differently in Figure 2 than are the on/off valves. (MQ’s Br. Opp. Mot. S.J. [Re: 102(b)] at 17). Multiquip argues that “[t]here is nothing whatsoever about the empty square boxes [(valves 41 and 43)] in Figure 2 to suggest they are proportional valves.” (Id.). Even Dr. Garris, MBW’s expert witness, agreed that there is nothing inherent in the depictions of valves 41 and 43 that precludes them from being on/off valves. (Second Baish Decl. Appdx. A, Garris Dep. at 148). As to the question of why valves 41 and 43 are depicted differently than the on/off valves at 42 and 44, Multiquip points out that to draw a detailed description of valve 43 as an on/off valve would require at least five small boxes in order to demonstrate the valve’s possible positions and resulting fluid flow. (MQ Br. Opp. Mot. S.J. [Re: 102(b)] at 8). Multiquip points out that the inventor may have been too pressed for space to depict valves 41 and 43 in as detailed a fashion as he depicted valves 42 and 44. (Id.).

While Multiquip’s proffered explanation is hardly convincing, it does not have to be. It is plausible, and it demonstrates that there is at least one other explanation

for the different depictions than the explanation proffered by MBW. It also highlights the fact that MBW's argument is based entirely on inference, namely, that because valves 41 and 43 are depicted differently than valves 42 and 44, and because 42 and 44 are on/off valves, the court can, therefore, infer that 41 and 43 are not on/off valves and thus must be proportional valves. Perhaps Figure 2 strongly supports such an inference, but it does not conclusively support such an inference. Additionally, though the court agrees that meaning should be attached to the inventor's decision to use different depictions for the valves, the court also finds that meaning should be attached to the inventor's decision to use the same words for the valves. The inventor consistently referred to all four of the valves, collectively and individually, as "control valves." (MQ Add'l PFF [Re: 102(b)] ¶ 28). Thus, to the extent MBW wants the court to infer a difference based on differing depictions of the valves, the court could conversely infer sameness based on the identical verbal descriptions of the valves.

## **2. Mushroom Shaped Actuators**

Figure 2 depicts mushroom shaped actuator symbols atop valves 41 and 43. MBW argues that the mushroom shaped symbol was used in U.S. patent 3773,084 (the '084 patent) to represent a similar device used specifically as part of a proportional pressure control system. (MBW Mem. Supp. Mot. S.J. [Re: 102(b)] at 20). Thus, MBW concludes, "the '084 patent demonstrates that the symbols used

for controlling valves 41 and 43 in Figure 2 of the German '169 patent are used to demonstrate control over proportional pressure control valves in the prior art.” (Id.).

Unfortunately for MBW, it is again dealing in inferences. Yes, it would appear that the mushroom shaped symbol has been used in prior art to depict operating mechanisms connected to proportional pressure control valves. However, this does not mean that such symbols must be used exclusively in conjunction with proportional control systems. Multiquip proffers evidence in the form of testimony of one of its experts, Dr. Tullis, who states that the “type of operating mechanism [depicted by the mushroom shaped symbols in Figure 2] can be used on many different kinds of valves.” (Tullis Decl. ¶ 68). According to Dr. Tullis, “[t]here is no relationship between the use of the symbol and the type of valve it is attached to.” (Id.). Hence, MBW may have proven that the mushroom shaped symbol can be used to depict an actuating device attached to a proportional control system; however, MBW has not proven that the mushroom shaped symbol is used to depict only those actuating devices that are attached to proportional control systems.

## **B. Paragraphs 0002, 0003, and 0005 of the German '169 Publication**

### **1. Paragraph 0002**

Paragraph 0002 of the German '169 patent details the shortcomings of the mechanically steered trowels in the prior art:

Apart from the fact that this multiplicity of controlling elements makes it very awkward for the operator to control the concrete smoothing machine, this type of purely mechanical control results in a control pressure of up to 17 kilograms. This additionally impedes the operation

of the concrete smoothing machine, a further disadvantage being that for adjusting the inclination of the rotor apparatuses said control pressure is continually present so that the operator must continually apply said control pressure during operation. A further disadvantage consists in the relatively elaborate mechanism for transferring the control motions from the control elements to the rotor apparatuses to be adjusted or to the rotor blades to be adjusted.

(MQ Add'l PFF [Re: 102(b)] ¶ 10). Both parties agree that this paragraph identifies at least two problems. The first such problem stems from the “multiplicity of controlling mechanisms” and “relatively elaborate mechanism for transferring the control motions from the control elements to the rotor apparatuses and rotor blades.” This first problem is a “complexity problem.” The second problem stems from the fact that the operator has to expend a significant amount of physical exertion in order to manipulate the controls. That, however, is where the parties’ agreement ends.

Multiquip holds that the paragraph identifies a third problem with the prior art mechanical trowels. This third problem stems from the fact that “control pressure is continually present so that the operator must continually apply said control pressure during operation.” Thus, Multiquip argues that, according the German ‘169 patent, the fact that the controls had to be continually operated on the prior art mechanical trowels (which employed mechanical proportional steering) was a problem. (MQ Br. Opp. Mot. S.J. [Re: 102(b)] at 11). Multiquip maintains that constant manipulation of the controls is a hallmark of proportional steering and, thus, the German ‘169 patent’s identification of constant manipulation of the controls as a problem means that the patent teaches away from proportional steering. (Id. at 12-13).

MBW strongly disagrees that paragraph 0002 identifies a third problem. According to MBW, the reference to the problem of constantly manipulating the trowel's controls is only an elaboration on the problem caused by the high physical exertion required to operate the machinery. MBW sees the two as part and parcel of the same problem. Thus, once that high physical exertion requirement is removed (through the introduction of hydraulic controls, be they on/off or proportional), the constant manipulation of the controls no longer remains a problem. (MBW's Reply Supp. Mot. S.J. [Re: 102(b)] at 4).

The court, for its part, agrees with MBW, as does Multiquip, that "constant manipulation is only a disadvantage when high control loads are applied." (Id.). However, what is not clear, and what Multiquip certainly would not agree with, is that the inventor of the German '169 patent agreed with that statement. While Multiquip's reading of paragraph 0002 as identifying three distinct problems does appear strained, it only appears as such based on the court's inherent agreement with the notion that constant manipulation of hydraulic controls would be an advantage rather than a disadvantage. The court cannot read its own belief into paragraph 0002 of the German '169 patent in order to conclusively determine what the paragraph intends. Ultimately, whether paragraph 0002 teaches away or towards proportional steering is a factual question that a jury will have to answer.

## **2. Paragraph 0003**

Paragraph 0003 of the German '169 patent states: "It is therefore the problem of the present invention to provide a concrete smoothing machine of the type stated at the outset which can be operated not only more simply but also less strenuously." (MQ Add'l PFF [Re: 102(b)] ¶ 11). Both parties cite this passage as supporting their respective positions: MBW - that the patent discloses hydraulic proportional steering; Multiquip - that the patent discloses hydraulic steering using on/off valves. (MBW Reply Supp. Mot. S.J. [Re: 102(b)] at 3; MQ Br. Opp. Mot. S.J. [Re: 102(b)] at 12). However, use of hydraulic steering controls, be they of the proportional or the on/off variant, would both achieve the goal of making steering simpler due to a need for fewer components, and less strenuous due to the fact that only minimal physical exertion would be required. (MQ Add'l PFF [Re: 102(b)] ¶¶ 13-14; MBW Resp. MQ Add'l PFF [Re: 102(b)] ¶¶ 13-14). Thus, paragraph 0003 offers no indication of which type of hydraulic valve is disclosed by the German '169 patent's steering mechanism.

## **3. Paragraph 0005**

Paragraph 0005 of the German '169 patent states:

The inventive measures achieve that the number of control elements is reduced, on the one hand, and the maximum control pressure to be applied by the operator is considerably reduced, on the other hand. At the same time, it results that the maximum occurring control pressure is to be applied only for changing the control motion, but not during the motion of the concrete smoothing machine executed by the selected actuation.



(MQ Add'l PFF [Re: 102(b)] ¶15). MBW points to the use of the word “maximum” in paragraph 0005 as an indication that “there is a wide range of other pressures available to be applied by the operator.” (MBW Reply Supp. Mot. S.J. [Re: 102(b)] at 5). Maximum pressure is to be applied to change control motion, but, MBW surmises, “something less than the maximum pressure is to be applied during the motion of the concrete moving machine.” (Id.). “This ‘other’ applied pressure may be any other applied pressure between a minimum pressure and a maximum pressure,” MBW concludes, “which is consistent with variable proportional pressure hydraulic controls.” (Id.).

MBW’s conclusion is called into question by Multiquip. Multiquip posits that the phrase “changing the control motion” used in paragraph 0005 simply means “going from one state of motion to another,” such as accelerating or decelerating, or going from being stopped to commencing motion. (MQ Add'l PFF [Re: 102(b)] ¶16). Dr. Garris, MBW’s expert, agrees with this interpretation of the phrase “changing the control motion” (MBW Resp. Add'l PFF [Re: 102(b)] ¶16). Multiquip insists that this agreed understanding of the phrase “changing the control motion” requires a finding that paragraph 0005 teaches away from proportional control. Multiquip offers the following explanation:

[C]onsider the most basic “change of control motion” — going from a standstill to forward motion. According to paragraph [0005], this can occur only by applying the “maximum control pressure,” or by deflecting the joystick to its farthest forward position — “full throttle,” in other words. Moving the joystick a little bit, halfway, or even almost all the way to its full forward position will accomplish nothing. *This is not*

*proportional control.* With proportional control, moving the joystick slightly forward will impel the trowel forward at a slow speed. Moving the joystick halfway to its full forward position will move the trowel forward at half speed, etc. Further, decreasing the pressure on the joystick when the trowel is at full speed changes the control motion, i.e., by causing deceleration. In that case, far less than the “maximum control pressure” is applied by the operator to change the control motion. This is in direct contradiction to the German Patent’s teachings, as recognized by MBW.

(MQ Br. Opp. Mot. S.J. [Re 102(b)] at 13-14).

Multiquip further calls into doubt MBW’s analysis of paragraph 0005 in regards to the use of the term “maximum” therein. MBW’s earlier assertion that the use of the word “maximum” only refers to putting the trowel in motion, and that then any amount of variable pressures along a range from minimum to maximum could be used during motion of the trowel is specifically challenged by Multiquip as incongruous with MBW’s own expert’s testimony. (Id. at 14). Indeed, Dr. Garriss did state that “changing control motion” included deceleration and acceleration. So, if “changing the control motion” requires maximum pressure, then this would certainly seem to vitiate MBW’s claim that variable pressure rates (i.e. anything less than maximum pressure) could be used to steer the trowel while in motion, because paragraph 0005 states that maximum pressure is required for changing the motion (i.e., starting, stopping, turning, accelerating, decelerating). The fact that only maximum pressure (i.e., the admittedly small amount of force necessary to overcome the activating mechanism within the valve) is to be used, and not any other variable force along a given range (as one would expect in a proportional

system) lends credence to Multiquip's argument that paragraph 0005 teaches away from proportional steering.

Paragraph 0005 also states that maximum pressure is not be applied during the motion of the trowel. This also lends credence to Multiquip's argument. An on/off valve does not require constant manipulation; the trowel operator would simply deflect the control joystick in the desired direction, and would then release the joystick, and the trowel would continue in that direction (even with the joystick at neutral) until the operator deflected the joystick in a different direction. Under such a scenario, maximum pressure (again, the small amount of pressure needed to deflect the joystick from neutral to a given direction sufficient to activate the valve) would only be used to change motions, but not during the continuation of a motion (i.e., while the joystick is in neutral and the trowel is moving in one given direction). If, however, the control valves were proportional, then it would not make much sense for paragraph 0005 to say that maximum pressure is used only during changing of the control motion, but not during motion. If a full range of pressures were available, as is the case with variable pressure proportional valves, then maximum pressure would not be needed to change the control motions, and maximum pressure could be used during motion. Dr. Garriss attempts to side step this logic by stating: "I think you can interpret [paragraph 0005] as a recommendation, you know . . . I think there's an implicit assumption here that one does not operate the device with the joystick in the maximum position under normal conditions." (MQ Add'l PFF [Re:

102(b)] ¶ 21). However, it is completely unclear what the rationale for this assessment is – other than to defend MBW’s position that the German ‘169 patent inherently discloses variable pressure proportional control valves. If it did contain such valves, then why would an operator not use them in maximum positions under normal operations? Is Dr. Garris’s position essentially that the German ‘169 patent offers a full range of available pressures – slight pressure for slow movement, more pressure for faster movement, maximum pressure for fastest movement – yet for some reason it is inoperable at the maximum setting? These questions are unanswered. Suffice it to say that Multiquip has presented material factual issues as to whether or not paragraph 0005 teaches away from proportional steering.<sup>13</sup>

### **C. Multiquip’s Prior Actions**

MBW looks to Multiquip’s prior actions in regard to the German ‘169 patent as evidence that the patent inherently discloses hydraulic proportional steering. During previous litigation between Multiquip and Allen Engineering regarding, among others, the ‘740 patent, Erik Swanson of Kenyon & Kenyon received a letter from Multiquip’s patent attorney, Frank Dykas. The letter stated “I need to know what the

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<sup>13</sup> MBW points out that certain apparatus, namely a HUSCO Friction Positioner Kit P/N 52524, can be used in conjunction with certain proportional control valves, such as the HUSCO valve 7470, in order to cause the German ‘169 patent to operate in line with Multiquip’s interpretation of paragraph 0005, despite utilizing proportional hydraulic valves. (MBW Reply Supp. Mot. S.J. [Re: 102(b)] at 6). This fact certainly may be relevant to rebutting Multiquip’s argument that paragraph 0005 teaches away from proportional valves; however, it does not conclusively rebut the factual issues Multiquip has raised.

The court also notes that Multiquip takes issue with MBW’s reference to the Friction Positioner Kit (which was first mentioned in Dr. Garris’s rebuttal report) as not timely disclosed. Because the court is ruling against MBW, any reference to the Friction Positioner Kit clearly did not prejudice Multiquip at the summary judgment phase. Thus, the court will deny Multiquip’s motion to strike. However, the court will do so without prejudice, allowing the parties to revisit the issue after they have conferred as to what further discovery is necessitated by this evidence, if it is to be presented at trial.

German company built. Was it an electric-over-hydraulic control system like the earlier Allen machines, or was it like the Whiteman<sup>14</sup> machine? This knowledge will affect whether we proceed with litigation or enter into some sort of cross-license agreement with Allen.” (Garris Decl. Appdx B., Ex. 13). Subsequently, the general manager of Multiquip’s plant in Boise wrote an email to Roger Euliss, Multiquip’s president, stating: “With all the pertinent information reviewed and in light of the German patent on hydraulic steering, Frank Dykas agrees it is best to proceed with the cross licensing agreement.” (Id., Ex. 14). According to MBW, “[t]he inference properly drawn from the fact that Multiquip decided to proceed with cross licensing, rather than litigation, is that the German ‘169 patent included proportional pressure steering control that invalidated the Multiquip ‘740 patent.” (MBW Mem. Supp. Mot. S.J. [Re: 102(b)] at 22).

As has been the case with many of MBW’s arguments, the alleged inference is certainly one which may be drawn. It is arguably the most probable inference. However, it is not the only inference that can be reasonably drawn. Multiquip admits that the existence of the German ‘169 patent was a factor in Multiquip’s decision to settle its dispute with Allen Engineering. (MQ Br. Opp. Mot. S.J. [Re: 102(b)] at 22-23). However, as Multiquip points out, the existence of the German ‘169 patent would have increased the expense of litigation with Allen Engineering, which could, in and of itself, have been the reason for the settlement. (Id. at 23). In short, the

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<sup>14</sup> Whiteman was Multiquip’s predecessor in interest.

court simply does not know what role the existence of the German '169 patent played in Multiquip's decision, and the court does not know what determinations Multiquip made regarding the German '169 patent.

MBW also points to a copy of the translated German '169 patent produced from Multiquip's records that contains the handwritten word "proportional" on the first page. (Garris Decl. Appdx B, Ex. 7). MBW proffers this as "evidence" of some sort that someone at Multiquip determined that the '169 patent disclosed proportional steering. Multiquip points out in its opposition brief that this handwritten note is almost certainly inadmissible under the Federal Rules of Evidence. (MQ Br. Opp. Mot. S.J. [Re: 102(b)] at 19-20). There is no indication of whether the note is a statement, a question, a note to inquire further, or whether it has some different meaning entirely. (Id.). Further, no one has any clue who wrote it, or what their basis for writing it was. (Id.). If it is not a statement, then how is it relevant? If it is a statement, then how would it not be excluded as hearsay? MBW does not answer these questions; indeed, MBW does not mention this inherently suspect piece of "evidence" at all in its reply brief. Thus, the court will not consider this handwritten note in reaching its decision in the instant motion.

#### **D. State of the Art at Time of the German '169 Patent Application**

MBW points out that the state of the art at the time the German '169 patent's application was filed included several different types of proportional control valves that could have been used in the system. (MBW Mem. Supp. Mot. S.J. [Re: 102(b)])

at 22). MBW justifies this resort to extrinsic evidence by citing *Continental Can Co. v. Monsanto Co.*, for the premise that a “gap in the reference may be filled with recourse to extrinsic evidence” when “the reference is silent about the asserted inherent characteristic.” 948 F.2d 1264, 1268 (Fed. Cir. 1991). However, the question is not whether the German inventor was aware of hydraulic proportional valves. MBW’s argument seems to be that if the German inventor were aware of such valves (which he would have been based on the state of the art, according to MBW), then he would have used them because they are clearly superior (according to MBW). Such hindsight justification simply is not adequate evidence, especially on motion for summary judgment. Indeed, such logic, if upheld, would openly encourage ambiguity during the patent application process if the inventor was aware that the court was simply going to construe such ambiguity as evidencing the best possible scenario it could be, based on the success of patents subsequent to the ambiguous patent. Thus, MBW’s evidence as to what the state of the art was at the time the application for the German ‘169 patent was filed is unconvincing; the question is not what could the German ‘169 patent disclose, it is what does it disclose.

#### **E. Conclusion**

MBW has clearly marshaled a fair amount of evidence in support of its motion for summary judgment as to the issue of anticipation. As compelling as some of that evidence may be, it only shows that the German ‘169 patent *may* inherently disclose

proportional hydraulic steering. The evidence, however, does not sufficiently show that one of ordinary skill in the art *would* find that proportional hydraulic steering is *necessarily* present in the German '169 patent. As a result, the court is obliged to deny MBW's motion for summary judgment as to invalidity under 35 U.S.C. 102(b).

### **III. INVALIDITY UNDER 35 U.S.C. § 103(a)**

MBW has also alleged that the '740 patent is invalid under 35 U.S.C. § 103(a). MBW has moved for summary judgment on this issue as well.

According to 35 U.S.C. § 103(a):

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Id. One of the rationales underlying the invalidating of patents that are "obvious" is that a "patent for a combination which only unites old elements with no change in their respective functions . . . obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skillful men." *Great Atlantic & Pacific Tea Co. v. Supermarket Equip't Corp.*, 340 U.S. 147, 152 (1950) (quoted in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007)). "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l*, 550 U.S. at 416.



### **A. *Graham v. John Deere Co.* Factors**

In applying the statutory language of 35 U.S.C. § 103(a), courts are to follow the framework set out by the Supreme Court in *Graham v. John Deere Co. of Kansas City*, 338 U.S. 1 (1966). Under the *Graham* framework:

the scope and content of the prior art are ... determined; differences between the prior art and the claims at issue are ... ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

*Graham*, 338 U.S. 17-18. Each of the four factors set out in *Graham* – 1) scope and content of the prior art; 2) difference between prior art and claimed invention; 3) level of ordinary skill in the art; and 4) objective evidence of nonobviousness – present questions of fact. *Environmental Designs, Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 695 (1983). “Obviousness,” however, “is a conclusion of law based upon [those] factual determinations.” *Id.*

#### **1. Prior Art**

MBW points to five pieces of prior art as relevant to the question of the obviousness of the ‘740 patent. (MBW Mem. Supp. Mot. S.J. [Re: 103(a)] at 11-12). This prior art consists of a riding power trowel, a patent for a riding power trowel,<sup>15</sup>

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<sup>15</sup> Originally, MBW cited to two riding trowel patents as prior art. However, Multiquip, in its opposition brief, cast doubt on the notion that one of those patents (referred to by the parties as the “Allen ‘833 patent”) met the statutory definition of prior art. (MQ Br. Opp. Mot. S.J. [Re: 103(a)] at 16-17). MBW thereafter retreated from its assertions as to the Allen ‘833 patent, no longer proffering it in support of the claim of obviousness, though also not conceding that the ‘833 patent is not prior art (essentially preserving the issue for a later date). (MBW Reply Supp. Mot. S.J. [Re: 103(a)] at 4, n. 7).

a type of hydraulic proportional control valve, and two patents for hydraulic proportional control valves. (Id.). The prior art riding trowel is the Allen Engineering Razorback Trowel (“the Razorback”). (Id. at 14). The prior art riding trowel patent is the previously discussed German ‘169 patent. (Id. at 12). The hydraulic proportional control valves proffered as prior art are the HUSCO Int’l valve Part Nos. 7470A15 and 7480-19 (“the HUSCO valves”). (Id.). The hydraulic control valve patents are: U.S. Patent No. 4,342,335 (“the ‘335 patent), and U.S. Patent No. 3,698,415 (“the ‘415 patent”). (Id. at 13).

The German ‘169 patent is a patent for a riding power trowel that utilizes hydraulic steering. As discussed in the previous section, it is unclear if the patent utilizes proportional hydraulic valves for steering, or on/off hydraulic valves for steering. However, it is clear that if the German ‘169 patent discloses proportional valves, then the ‘740 patent will have been anticipated, and thus will be invalid under § 102(b) – thus vitiating the need for an analysis of invalidity under 103(a). Therefore, for the purposes of the § 103(a) analysis, the court will presume that the German ‘169 patent does not disclose proportional control valves.

The Razorback is a riding power trowel that utilizes hydraulic non-proportional steering. (MQ Add’l PFF [Re: 103(a)] ¶ 24). The HUSCO valves are proportional pressure control hydraulic valves and are, in fact, mentioned in the “best mode” section of the ‘740 patent. (Id. ¶ 36). The ‘335 patent “discloses a hydraulic valve detent mechanism for proportional pressure output control valve.” (MBW Mem.

Supp. Mot. S.J. [Re: 103(a)] at 13). The '415 patent "discloses the use of proportional pressure output control valves that may be operatively interconnected between a hydraulic pump and a dual action hydraulic cylinder to selectively deliver hydraulic fluid from the pump to the dual action hydraulic cylinders."<sup>16</sup> (MBW PFF [Dkt #79] ¶ 80).

## **2. Differences Between Claimed Invention and Prior Art**

It is undisputed that for the purposes of the § 103(a) analysis the only difference between the German '169 patent and the '740 patent is the use of proportional hydraulic valves in the '740 patent.<sup>17</sup> It is also undisputed that there is no difference between the HUSCO valves and the valves disclosed in the '740 patent. As to the other three pieces of prior art, the parties disagree as to the extent of differences between the prior art and the '740 patent.

The parties agree that the Razorback differs from the '740 patent in that the Razorback used electrical components in its hydraulic system, and it did not utilize proportional steering. (MBW Resp. MQ Add'l PFF [Re: 103(a)] ¶ 24). Multiquip asserts that the Razorback further differs from the '740 patent in that it used three engines (the '740 patent uses one) and three rotor assemblies (the '740 patent uses

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<sup>16</sup> The court notes that Multiquip takes issue with MBW's reference to the '415 patent (which was first mentioned in Dr. Garri's rebuttal report) as not timely disclosed. Because the court is ruling against MBW, any reference to the '415 patent clearly did not prejudice Multiquip at the summary judgment phase. Thus, the court will deny Multiquip's motion to strike. However, the court will do so without prejudice, allowing the parties to revisit the issue after they have conferred as to what further discovery is necessitated by this evidence, if it is to be presented at trial.

<sup>17</sup> MBW would of course maintains that the '740 patent discloses proportional valves; however, as previously mentioned, if MBW can show as much then the '740 patent is invalid under § 102(b), thus no § 103(a) analysis would be necessary.

two). (MQ Br. Opp. Mot. S.J. [Re: 103(a)] at 17). However, Multiquip does not point out the significance of these differences in reference to the question of the obviousness of substituting hydraulic proportional control valves for the non-proportional hydraulic control system of the Razorback. It seems that Multiquip's main contention regarding the Razorback is that the Razorback that was displayed at the World of Concrete trade-show in January 1996 (thus bringing it within the statutory definition of prior art<sup>18</sup>) was different than the present day Razorback. (Id. at 18) (stating that "Allen Engineering made substantial changes to [the Razorback's] structure . . . and internal working . . . after the 1996 trade-show."). If this is indeed the case, it would seem to the court that the obviousness analysis should focus on the attributes of the "prior-art Razorback," not the "present-day Razorback." If the court is correct on this matter, then it would appear that the question of what those attributes of the "prior-art Razorback" are is a factual question that needs to be resolved.

Multiquip asserts that the '335 patent would be ill-suited for use in a hydraulically steered riding trowel. (Id. at 18-19). The '335 patent, according to Multiquip, would be inappropriate because its detent mechanism would cause the trowel to "continue to accelerate . . . even if the operator released the joystick." (Id. at 18). MBW, for its part, states that this defect would be overcome if the detent

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<sup>18</sup> 35 U.S.C. 102(b) describes prior art inventions as including those that were "in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." The date the application was filed for the '740 patent was January 23, 1997, more than one year after the date the Razorback was on public display and for sale at the World of Concrete show in January 1996

mechanism were disengaged, which would cause it to act “exactly like prior art proportional control valves.” (MBW Mem. Supp. Mot. S.J. [Re: 103(a)] at 13). Multiquip questions this logic by pointing out that the point of the ‘335 patent is the detent mechanism, thus, nothing about it would cause one of ordinary skill in the art to consider employing it in a fashion that would require disabling of the detent mechanism. (MQ Br. Opp. Mot. S.J. [Re: 103(a)] at 17).

Multiquip levels a similar argument against the ‘415 patent, which Multiquip describes as “a valve using an exponential spring force, such that the force required to open the valve increases exponentially as the valve is opened farther.” (Id. at 19). This feature, according to Multiquip, is useful in automotive transmissions (the primary application for the invention) where greater sensitivity is desirable at low speeds, and lesser sensitivity is desirable at high speeds. (Id. at 19-20). This feature, however, would not be advantageous in riding trowels, which “operate in a much narrower range of speeds than do automobiles.” (Id.).

MBW impliedly concedes that neither the ‘335 patent nor the ‘415 patent would be ideal for use as proportional steering control valves for a riding trowel. (MBW Reply Supp. Mot. S.J. [Re: 103(a)] at 12, n. 20). However, MBW points out that the ‘335 and ‘415 patents disclose “proportional control valves, and they can be used in any application.” (Id. at 12). MBW further points out that it does not matter if they would be inferior, it only matters if it would be obvious to one of ordinary skill in the art to combine them with a prior art non-proportional, hydraulically controlled

riding trowel. (Id.) (citing *Leach v. Rockwood & Co.*, 273 F. Supp. 779, 788-89 (W.D. Wis 1967) (“Although some of the prior art patents mentioned in this case showed devices which were not practicable or operable, they still must be considered, if they divulge ideas which are significant.”)).

### **3. Level of Ordinary Skill in the Art**

MBW proffers the following explanation of the level of ordinary skill in the art:

Multiquip’s technical expert, Dr. Tullis, asserts that one of ordinary skill in the art with respect to the ‘740 patent would typically have a Bachelor of Science Degree in a related engineering discipline or enough on-the-job training to be knowledgeable about mechanical, electrical and hydraulic equipment and controls. Such a person must also have several years of experience with concrete trowels and their controls including knowledge of the prior art, see, Expert Report of Dr. Tullis at ¶ 63 (Olejniczak Ex. H). Dr. Tullis expounded that the type of controls are “general controls that control mechanical, electrical and hydraulic equipment.” (deposition testimony of Dr. Tullis at p.121, L5-6, Olejniczak Ex. I). Dr. Garriss, M-B-W’s technical expert, agrees with this assertion (Garriss at p.190, L23 - p.193, L18, Olejniczak Ex. K).

(MBW Mem. Supp. Mot. S.J. [Re: 103(a)] at 14). Unsurprisingly – since MBW based its proffer on the testimony of Multiquip’s expert – Multiquip does not dispute the foregoing assessment, nor does the court have any reason to dispute it.

### **4. Objective Evidence of Nonobviousness**

Certain objective factors can indicate that what might otherwise appear to be an obvious combination of elements in fact was not. Such factors include: whether the invention satisfied a long-felt need, whether others tried and failed to satisfy that need, and whether the invention has enjoyed commercial success. *Graham*, 383 U.S. 17-18. Additionally, evidence that the alleged infringer copied the claimed

invention “provides compelling evidence of nonobviousness.” *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1285 (Fed. Cir. 2000). In the instant case, Multiquip raises material factual questions as to each of these factors.

Multiquip posits evidence and argument that “[s]ince at least 1959, inventors had been trying to find a hydraulically steered machine that would smooth and finish concrete quickly and efficiently. (MQ Br. Opp. Mot. S.J. [Re: 103(a)] at 26). Difficulties incorporating hydraulics into the controls resulted in the continued propagation of mechanically steered machines – which, as previously discussed, are physically exhausting to operate. (Id.) (citing patents ranging from 1976 to 1996 for mechanically steered machines). The inventions, such as the ‘833 patent and the Razorback, that were able to, through the use of hydraulics, overcome the problem presented by mechanically steered trowels (the physical exertion required for operation), carried with them a negative tradeoff – they did not have proportional control. Thus, it was the ‘740 patent that was able to offer the high level of control inherent in proportional steering, as well as the physical ease of operation inherent with hydraulic steering.

MBW criticizes the notion that the ‘740 patent satisfied a long-felt need, citing *Texas Instruments Inc. v. U.S. Int’l Trade Comm’n*, for the premise that “long-felt need is analyzed as of the date of an articulated identified problem and evidence of efforts to solve that problem.” 988 F.2d 1165. MBW asserts that the articulated problem the ‘740 patent sought to solve was simply that presented by the on/off-

controlled Allen Engineering trowels (which were first introduced in 1996). However, such a narrow view ignores the scope of the analysis presented in *T.I. v. U.S. Int'l Trade Comm'n*, in which the court looked at the history of the applicable industry's efforts to address a given problem, rather than simply comparing the invention to the last available patent that sought to address that problem. 988 F.2d at 1178. Indeed, the on/off-controlled Allen Engineering trowels were not the genesis of the problem the '740 patent sought to solve (combining the physical ease of hydraulic steering with the control of proportional steering). Rather, the Allen Engineering trowels evidence that, as late as 1996, Allen Engineering had not been able to develop a trowel that would resolve both those problems.

Multiquip credits its hydraulically steered trowels with helping it grow its market share in power trowels from ten percent to thirty-five percent in a little over ten years. (MQ Br. Opp. Mot. S.J. [Re: 103(a)] at 27). Such commercial success, if proven, would weigh in favor of a finding of nonobviousness. See *Symbol Tech., Inc. v. Opticon, Inc.*, 935 F.2d 1569, 1579 (Fed. Cir. 1991) (noting the claimed invention's commercial success as a factor weighing against a finding of obviousness). MBW dismisses Multiquip's assertions of commercial success as mere "attorney argument." Such dismissiveness is perplexing, as this attorney argument is based on the testimony of Roger Euliss, the president of Multiquip. The court has no difficulty accepting that a jury might find the testimony of Multiquip's president insightful as to the question of the role the '740 patent played in his company's



commercial success. Such evidence – though self-serving (an issue MBW’s attorney’s are free to explore on cross-examination) – is admissible, and certainly is not mere “attorney argument.”

Lastly, Multiquip alleges that Luc Zivieri – Barikell’s general manager, and the only Barikell employee responsible for the design of the Accused Trowels (MQ Add’l PFF [Re: 103(a)] ¶ 46) – copied Multiquip’s design. (Br. Opp. Mot. S.J. [Re: 103(a)] at 27). Multiquip’s allegations are based in part on Mr. Zivieri’s lack of education and work experience in hydraulics (MBW Resp. Add’l PFF [Re: 103(a)] ¶ 47), as well as Mr. Zivieri’s inability to presently produce any prototypes, design drawings, notes, (Id. ¶ 50) or invoices for the hydraulic parts used in his alleged design experimentations. (MQ Br. Opp. Mot. S.J. [Re: 103(a)] at 28). Multiquip further points to statements by Mr. Zivieri’s assistant<sup>19</sup> as evidencing that Mr. Zivieri did not begin work on the Accused Trowels until after seeing Multiquip’s hydraulically steered riding trowel at the World of Concrete trade-show in 2000 in Orlando, Florida. (Id.; MQ Add’l PFF [Re: 103(a)] ¶ 48). Multiquip points also to certain of Mr. Zivieri’s assistant’s correspondences<sup>20</sup> which MBW posits substantiate the notion that Mr. Zivieri attempted to copy one of Allen Engineering’s machines as well. (MQ Br. Opp. Mot. S.J. [Re: 103(a)] at 28). MBW rejects all of Multiquip’s allegations; however, the only evidence MBW can point to is the report of its expert, Dr. Garris,

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<sup>19</sup> The content of these statements remains under seal.

<sup>20</sup> The content of these correspondences remains under seal.

which, in regard to findings pertaining to Mr. Zivieri, is predominately based on the testimony of Mr. Zivieri. (MBW Reply Supp. Mot. S.J. [Re: 103(a)] at 12) (citing Garris Decl. [Re: Invalidity] ¶¶ 273-282). Such evidence is not sufficient to conclusively rebut the material factual questions raised by Multiquip.

**B. Was the Claimed Subject Matter of the ‘740 Patent Obvious to One of Ordinary Skill in the Art?**

As the court earlier stated, obviousness is a conclusion of law reached after factual determinations are made in reference to the *Graham* framework factors. *Environmental Designs, Ltd. v. Union Oil Co. of California*, 713 F.2d 693, 695 (1983). In the instant case, several factual issues remain concerning the *Graham* factors. The parties agree as to what constitutes the prior art (except for in regards to the ‘833 patent);<sup>21</sup> however, they disagree strongly as to the differences between some of that prior art and the ‘740 patent. The ramifications of these differences necessarily inform whether or not that prior art (namely, the Razorback, the ‘335 patent, and the ‘415 patent) would lead a person of ordinary skill in the art to develop a design comprised of the claims in the ‘740 patent.

The court, for its part, finds that while the Razorback, the ‘335 patent, and the ‘415 patent are not irrelevant to the question of obviousness, their relevance is

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<sup>21</sup> See footnote 15. The court further notes that given Multiquip’s allegations that the record simply does not disclose sufficient information to make findings regarding the Razorback, the question of whether the ‘833 patent is prior art could become incredibly significant. This would especially be the case if the jury were to find that the German ‘169 patent taught away from proportional steering (see discussion below).

largely overshadowed by the German '169 patent and the HUSCO valves.<sup>22</sup> Indeed, Multiquip's own expert testified that: "You could put a HUSCO valve in the German patent and make it proportional." (MBW Mem. Supp. Mot. S.J. [Re: 103(a)] at 16). Against such testimony, the '335 patent and '415 patent do not seem to add much to the obviousness analysis. Such testimony, rather, lends credence to MBW's assertion that "application of a proportional pressure control valve [(such as HUSCO valves)] to a hydraulically controlled ride-on power trowel [(such as is disclosed in the German '169 patent)] is no more than a predictable use of prior art elements according to their established functions." (MBW Mem. Supp. Mot. S.J. [Re: 103(a)] at 2) (citing *KSR Int'l*, 550 U.S. at 417 (stating "when a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious.") (citation omitted)). However, the indicia of obviousness as to combining the HUSCO valves and the German '169 patent can be rebutted by a showing that the German '169 patent teaches away from proportional steering, as Multiquip argues that it does. See *KSR Int'l*, 550 U.S. at 416 (stating that "when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.") (citing *United States v.*

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<sup>22</sup> Given the question as to whether or not the German '169 patent teaches away from proportional steering (see discussion below), the Razorback is not as overshadowed by the German '169 patent as the '335 and '415 patents are overshadowed by the HUSCO valves. Indeed, given that the HUSCO valves are suggested in the best mode section of the '740 patent, the parties' disagreements as to the '335 and '415 patents seems superfluous based on how little those patents add to the discussion – at least as far as the court is concerned.

*Adams*, 383 U.S. 39, 40 (1966)). As the court already indicated in its discussion of anticipation, whether the German ‘169 patent teaches away from proportional steering is a factual question the jury will determine. See *In re Harris*, 409 F.3d 1339, 1341 (Fed. Cir. 2005) (“Whether an invention has produced unexpected results and whether a reference teaches away from a claimed invention are questions of fact.”).

MBW rejects the notion that its claim of obviousness is dependent on the German ‘169 patent,<sup>23</sup> and asserts that the Razorback combined with the HUSCO valves, the ‘335 patent, or the ‘415 patent demonstrates the obviousness of the ‘740 patent. (MBW Reply Supp. Mot. S.J. [Re: 103(a)] at 8-9, n.13). The Razorback discloses hydraulic steering, but not proportional steering. MBW points out that proportional steering is preferable, and “[t]here [were] only a ‘finite number of identified predictable solutions’ to overcome the problematic on-off valves, thus ‘a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.’” (Id. at 9) (quoting *KSR Int’l*, 550 U.S. at 419). However, this assertion beckons the question: “then why did the inventor of the Razorback and the ‘833 patent fail to include proportional steering?” Was he not of ordinary skill in the art?

Lastly, numerous factual questions remain as to the objective factors of nonobviousness. Multiquip has raised material factual questions as to the long-felt

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<sup>23</sup> To be certain, the court is by no means indicating that MBW’s claim is dependent on the German ‘169 patent.

need of the claimed invention, the commercial success of the claimed invention, and as to whether the Accused Trowels' designer copied Multiquip's machine. Presently, there simply is not enough evidence before the court to make a factual finding as to these issues.

### **C. Conclusion**

An examination of the *Graham* factors reveals that factual issues remain, including: whether the '833 patent is prior art; what the attributes of the "prior-art Razorback" are; the extent of the differences between some of the prior art and the '740 patent; whether the German '169 patent taught away from proportional steering; and the existence of objective factors. Given the remaining predicate factual questions, the court cannot enter a finding of law as to obviousness at this time.

## **CONCLUSION**

As described above, the court finds that the Accused Trowels literally infringe the '740 patent. The court subsequently finds that the Accused Trowels equivalently infringe the '740 patent, unless the word "attached" in claims one and two of the '740 patent is held to mean only "directly affixed." The court also finds that MBW has not proffered any indication that its evidence as to patent misuse (evidence that it bears the burden of producing and demonstrating the admissibility of) is admissible. Thus, the court denies MBW's motion for summary judgment as to non-infringement, and grants Multiquip's motion for summary judgment as to infringement. As the court indicated in the body of its opinion, it will consider a timely filed and properly

supported motion for reconsideration as to the issue of the patent misuse defense if MBW can show, *inter alia*, that its proffered evidence as to the first prong of the patent misuse analysis (refusal to license to third parties) is admissible.

As described above, the court finds that the '740 patent is not conclusively anticipated by the German '169 patent. A material factual question remains as to whether the German '169 patent inherently discloses proportional steering. Hence, the court denies MBW's motion for summary judgment as to invalidity under 35 U.S.C. § 102(b).

As described above, the court finds that the '740 patent is not conclusively obvious. Several predicate factual issues must be resolved before the court can make a legal finding as to obviousness. Therefore, the court denies MBW's motion for summary judgment as to invalidity under 35 U.S.C. § 103(a).

Accordingly,

**IT IS ORDERED** that MBW's Motion for Partial Summary Judgment Re: Non-Infringement (Docket #80) be and the same is hereby **DENIED**;

**IT IS FURTHER ORDERED** that Multiquip's Motion for Partial Summary Judgment (Docket #73) be and the same is hereby **GRANTED**;

**IT IS FURTHER ORDERED** that MBW's Motion for Partial Summary Judgment Re: Invalidity Under 102(b) (Docket #76) be and the same is hereby **DENIED**;

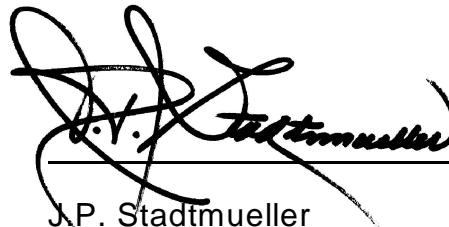
**IT IS FURTHER ORDERED** that MBW's Motion for Partial Summary Judgment Re: Invalidity Under 103(a) (Docket #78) be and the same is hereby **DENIED**;

**IT IS FURTHER ORDERED** that Multiquip's Expedited Motion to Strike and to Preclude Testimony or in the alternative Motion to Amend Scheduling Order (Docket #70) be and the same is hereby **DENIED without prejudice**; and

**IT IS FURTHER ORDERED** that Multiquip's Expedited Motion for Leave to File Supplemental Brief in Support of 7.4 Motion to Strike (Docket #93) be and the same is hereby **DENIED as moot**.

Dated at Milwaukee, Wisconsin, this 29th day of September, 2009.

BY THE COURT:

A handwritten signature in black ink, appearing to read "J.P. Stadtmueller", is written over a horizontal line. The signature is stylized with large loops and a long horizontal stroke extending to the right.

J.P. Stadtmueller  
U.S. District Judge